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EXAMINER

SHAW, SHAWNA JEANNINE

ART UNIT PAPER NUMBER

3737

DATE MAILED: 12/03/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/973,205

Applicant(s)

VAHASALO ET AL. *CA*

Examiner

Shawna J. Shaw

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-6 and 8 is/are allowed.
- 6) ☒ Claim(s) 1, 7, 9, 10, 12-17, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 11 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1, 7, 9, 10, 12-17, 19 and 20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

2. Claims 7-9 and 15 are objected to because of the following informalities: In claim 7, the phrase "for communicating the resonance signals the RF transmitter..." is confusing. In claim 8 line 9, it appears that "form" should be --from--. In claim 9 line 14, it appears that "[[.]]" should be --(ii)--. In claim 15 line 10, "an input means operator instructions are entered" is confusing. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 7, 9, 12-14, 17 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Murkami et al. of record.

Regarding claims 1, 7, 9, 12, 13, 17 and 20, Murkami et al. teaches a magnetic resonance apparatus and method including wireless communication of control signals from outside the MR suite to the scanner (35) and resonance signals from the RF coil (26) to the image processing system (1). See fig. 8, col. 3 lines 25-31 and col. 4 line 65 – col. 5 line 17. Regarding claim 14, Murkami et al. teaches a magnetic resonance method including receiving magnetic resonance signals with at least one RF coil (8-2), wirelessly communicating an identification of the RF coil(s) via distinct frequencies and reconstructing the resonance signals with image processor (1). See fig. 7A and B.

4. Claims 15 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Frelburger et al.

Regarding claims 15 and 16, Frelburger et al. teaches a remote control device (140) for use in conjunction with various types of diagnostic imagers including wireless communication and receiving means (175) and a user interface (145) comprising input and display means. See col. 6 lines 38-44 and 45-61.

### ***Claim Rejections - 35 USC § 103***

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murkami et al. of record.

Regarding claim 10, although Murkami et al. teaches using a plurality of coils and identifying each coil, a handshaking protocol is not addressed explicitly. However, lacking any criticality, the type of identification used would have been an obvious matter of design choice to a person of ordinary skill in the art without undue experimentation.

6. Claims 1, 7, 9, 10, 12-14, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kormos et al. of record in view of Frelburger et al.

Regarding claims 1, 7, 9, 10, 12-14, 17, 19 and 20, Kormos et al. teaches a system and method for using a wireless remote control<sup>device</sup> in an MRI apparatus. Kormos et al. further teaches that the remote control may use either IR or RF signals. Kormos et al. differs from the claimed invention in that communication of: control signals from outside the MR suite to the scanner, and resonance signals from inside the suite to the image processing system, are performed using cables. Frelburger et al. teaches RF

wireless transmission of control signals to an imaging device, and obtained image signals to an image processor. See col. 3 lines 2-15 and col. 6 lines 38-61. It would have been obvious at the time the invention was made to a person of ordinary skill in the art to modify the hand-held device of Kormos et al. to further wirelessly transmit control and image signals as taught by Frelburger et al. to reduce required processing space and other limiting physical constraints (Frelburger et al., col. 1 lines 15-25). In addition, although specific protocols of RF communication are not addressed, lacking any criticality, techniques such as handshaking would have been an obvious matter of design choice to a person of ordinary skill in the art depending upon the particular application.

***Allowable Subject Matter***

7. Claims 2-6 and 8 are allowed.
8. Claims 11 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawna J. Shaw whose telephone number is (703) 308-2985. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Ruhl can be reached on (703) 308-2262. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3590.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.



Shawna J. Shaw  
Primary Examiner  
11/25/03